

Sustaining the studio: A snapshot of academics' perceptions towards studio in 2007

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Abstract

'The studio' is considered fundamental and central to the education of architecture students and yet its meaning is expansive and ambiguous. References to 'the studio' date back to 1750s in France, at the Academie des Beaux-Arts and many elements of this studio are still prevalent today.

In 2007, architectural academics in Australasia were asked to define the 'studio' and to elucidate the variety of meanings. This paper will report the results of a series of interviews and focus groups about academics' perceptions of the studio. The paper identifies central themes on the basis of frequency and highlights the differences in practice between institutions. Physical workspace, interestingly, was linked to less than half of the studio descriptions. This percentage increased to two-thirds when associations to teaching spaces and conceptual spaces (learning communities and virtual networks) are included. The other major link made to 'studio' and its meaning were to the unit of study in 'design studio'. This paper investigates why the associated meaning of studio has evolved and blended with design studio from the 1990s to 2007. Other themes to be discussed will include teaching approaches to increase student engagement, and the impact of students' mobility and reduced contact hours leading to the studio being a day or an event. In conclusion the paper will identify how academics in Australasia are sustaining 'studio' according to current demands of the university environment.

Keywords: Studio, design teaching, architectural education, academics' perceptions.

1 Introduction

Two recent research grants in Australasia have identified that architectural academics have multiple understandings of the term 'studio'. The grants were awarded through The Australian Learning and Teaching Council (ALTC). The first grant was a scoping study to identify opportunities and problems faced by architectural education in Australasia (Ostwald and Williams). The second grant examined the studio across the creative disciplines (art, fashion, graphic, interior, architecture, etc.) (Forsyth, Zehner and McDermott). This paper explores in

more detail the data collected for the scoping study and specifically from the interview transcripts describing studio.

The transcripts captured the use and forms of studio in 19 (Australasian) schools of Architecture. Ostwald and Williams defined studio in 2008, to be “Typically, both a form of small group, project-centred teaching and a space or place for enculturation in a design profession and its practices.” (205). Preliminary findings suggest the meaning of studio has become interchangeable with design studio (Ostwald and Williams 146). The study hypothesised whether the reduction in studio space heralded the expansion of studio references in curriculum titles (design studio) to ensure the identity of studio (18). The study identified three significant issues that academics believe pose problems to the design studio: insufficient studio space, increase in class sizes and insufficient staffing (147). According to the latest data, design studio was the single largest component of the curriculum and typically represented 39% (18 and 139). In the online-survey academics ranked design studio as ‘extremely important’ and above any other curricula item (134).

The second grant has collected data on studio in the creative disciplines by hosting forums. The key topics generated in the architecture discipline were: space, student engagement, integrating virtual technology in the studio, student diversity, staffing, assessment, and curriculum and research (Forsyth, Zehner and McDermott 28). These topics were predictable but what was unexpected were some provocations made concerning whether studio space mattered, had studio environments evolved to engage the current generation of students and what signifies ‘smart’ teaching (effectiveness). These questions were posed by academics that regularly worked with limited flat floor teaching spaces (no studios), large class sizes, and adopted principles of tertiary learning. It appeared, from personal observations, that many participants in the discussion were challenged by concepts that did not rely on physical studio spaces.

1.1 The Australian Context

In Ostwald’s and William’s *Understanding Architectural Education in Australasia* a number of significant factors are cited from the 1990s that created a new environment for schools of Architecture to operate in. These were: the re-introduction of university fees and the reduction in government funding; an increase in the number of student places offered, increased recruitment of international students from Southeast Asia; Institutes of Technology transitioned to University status and established research; and the development of higher education pedagogy and its evaluation (13). The outcome of these factors combined was the expansion of students studying architecture. An additional 2000 places were created in Australia between 1994-2000 (104).

Descriptions of studio and design studio from the early 1990s to the present day illustrate the differences caused by increased class sizes. Design studio was initially described in the 1990s as a remnant link to original approaches to architectural

education. Generally, students worked in a studio on a design problem, received 'over the board' tutelage and presented to peers and a tutor (Maitland 203). This is commonly referred to as the Beaux Arts' *atelier* model, where students entered an atelier to study and work under a master (Draper). Many principles from the original model can be observed in current studio practices and the structure of design studio units. These are: the emphasis on the design project; the approach to develop a preliminary solution (equisse) to be further resolved; an environment for students to be enculturated with the profession's values and norms (Ostwald and Williams 8). Shannon provides another description of studio; to be "a physical space as a site for teaching and learning experiences, and to an interactive culture between the students and staff developed within this physical space." (8). Shannon's research also cites Maher's ideal amount of studio space, 7.5m² per student, tabled in a 1992 discussion paper for the New South Wales RAA (qtd. Shannon 8).

The percentage of design taught in the schools' curriculum fluctuated between the ranges of 25% to 75% in the mid 1990s (Ostwald and Williams 25). This suggests a number of approaches were practiced and that studio may have encapsulated many domains of knowledge and skills in some schools. By 2007, no schools of architecture employed a traditional atelier model because teaching was supplemented by lectures or by other large-scale teaching methods. The last form of the traditional atelier model ceased at the end of the 20th century (Ostwald and Williams 19). Studio spaces in Australasia range from: dedicated workspaces, 'hot-desking', space for part or one day only, generic classroom/ computer laboratory spaces with pin-up and none (Ostwald and Williams 146).

1.2 The United States of America (USA) and the United Kingdom (UK) context

Many of the problems discussed in the Australasian context were also experienced in the USA and UK. In the USA, the Boyer and Mitgang report (1996) identified that architectural education was expensive to run (space and staffing) and did not garner significant research outcomes or grant generation like schools of Science. In the UK, a paper describing the new 'Portsmouth model' highlighted the dramatic increase in student numbers in the 1990s, which demanded a new approach to maximize existing staff and 40% less space (Potts 241). Design studio was considered paramount and therefore the teaching approach in areas of technology and history were rationalised to lectures only. Resources saved were redirected to studio. Portsmouth also adopted a vertical studio structure to maintain small group teaching and utilize peer learning. Students from different year levels selected from the same studio offerings. The studios typically contained 36 students, a full-time academic and part-time teaching assistant (Potts 248). Since its restructure in the mid 1990s, the model has managed a doubling of student numbers and a further reduction in space (Potts 251). The vertical studio model is typically associated with the AA school in the UK and RMIT in Australia. These two

examples, the Boyer and Mitgang report (1996) and the 'Portsmouth model' illuminate the external pressures generated from the wider university system and its management. Design studio and studio culture have been both lauded and questioned in regard to their educational benefits. The studio model has been highlighted as an excellent teaching method to other disciplines. Schon's seminal work on reflective learning (1983) used examples in architecture, particularly in the one-on-one desk crit, to demonstrate good practice. This was debated soon after regarding its effectiveness (Rapoport). The *Boyer and Mitgang* report (1996) proposed that the project based approach and the use of critical and reflective processes were valuable contributions to tertiary education. A lot of international interest and research resulted from the University of Newcastle (Australia) problem based learning model in the late 1980s and 1990s.

In terms of the dominance of design in the curriculum, Cuff elaborated that perhaps this too was its greatest flaw (Cuff 63). Since the shift of architecture education into a formalized university system, debates have arisen regarding the amount of design education versus practical working skills and knowledge in construction and practice. Many academics and practitioners still believe that graduates have inherent deficiencies in their design/decision-making processes due to prioritising design formalism, conceptual thinking and the expansion of theory (Segal; O'Dwyer; Haysom; Egan; Crosbie; and Branch). A number of damning reports into the construction industry and architecture in the UK led academics to express that emphasis on the design product, rather than the process, was to the detriment of architecture education (Nicol and Piling 10). Research shows that in Australasia, studies in professional practice have reduced over the past 20 years and theory and research has increased (Ostwald and Williams 131-132). In addition, graduates in Australia have evaluated their courses poorly in Course Evaluation Questionnaires (CEQs) due to their concerns of being under prepared for work (Murray).

The presumption that studio culture was beneficial and positive has also been debated. A number of articles and reports in the USA by academics and students questioned the costs' to students' health, education and connection to society, due to the inordinate amount of time spent in the studio and enculturation process (Bachman and Bachman; AIAS Studio Culture Report; Temkin; Monaghan; and Fisher). In the UK, respected architecture educator George Henderson concurred, observing that studio was difficult to sustain and make attractive when staffing, funding and access has been reduced and students were combining study with paid work (qtd. in Leon). This article also speculated the conditions in Australia were different as students were disconnected from the campus as they lived at home and therefore, studio became a timetabled discussion. In summary, the change in the university environment to a more business-like model, requiring a new level of accountability, has led to a blurring between studios and design studios, but also a new level of inquiry. The pressures exerted by the growth in student numbers and the expansion of the academic duties has caused shifts. These

conclusions may seem obvious, but how they manifested in the schools in Australasia has not been researched. The research question is to identify the different definitions and practices of “the studio” from 2007. This paper and subsequent doctoral work seeks to establish the current positions of “the studio” and to support future developments in design studio teaching.

2 Method

The approach adopted for this paper draws from interpretative ethnographic methodologies to capture and understand lived experiences (Denzin). The transcripts were analysed by looking for re-occurring patterns of discussions that gave in-depth understanding of beliefs and practices using the QSR NVivo database (Geertz 27). Analysis of the data was also consistent with the grounded theory approach in that the audio recordings were transcribed and then categorised by making comparisons (Creswell). Codes were identified from the thematic analysis of transcripts using standard qualitative data analysis guidelines, and later structured into primary, secondary and tertiary level codes (Table 1).

| Primary Codes | What is studio? | Studio Characteristics' | What hinders studio? |
|---------------------------------|--|--|--|
| Secondary/ Tertiary Codes | <i>Space</i> <i>Physical student workspace</i> <i>Teaching space</i> | <i>Space characteristics</i> | <i>Commuter campus</i> |
| | <i>Teaching method/approach</i> | <i>Studio culture</i> | <i>Time contact with staff</i> <i>unit percentage and value in the course</i> |
| | <i>Design Unit</i> | <i>Integration of computing</i> <i>Facilities</i> <i>BIM</i> | <i>Student employment needs</i> |
| | <i>Collaborative/ peer learning (includes reference to studio culture)</i> | <i>Time</i> | |
| | | <i>Accessibility to space</i> | |
| | | <i>Staff availability</i> | |
| | | | |

Table 1: Coding themes

The interviews captured 37% of the 300 identified full-time architecture academics. The sampling is considered valid as there are more benefits gained from a modest number of participants across all schools providing a rich and in-depth data than the superficial responses

from many (Patton). Participation by the 39 academic managers (Head of Schools and Program Heads) and 73 academic staff was voluntary (Ostwald and Williams 33). Academic managers were interviewed individually and the remainder of the academic staff were invited to the focus group session. Open ended questions and prompts were used to ensure participants had opportunities to explore new areas of discussion as well as discuss the initial prompt (Creswell). For example, an open-ended question posed to academic managers was "What form does the studio have here?" In the focus groups a greater number of questions and prompts were used to gain an understanding of local perceptions of studio. It was thought that this group would have more immediate and detailed experiences than their managers. Essentially, both academic managers and focus groups were asked to clarify what form the studio takes or what the term studio means in their schools.

In this paper the results and discussion will focus on the primary code, "*What is studio?*" The themes identified were: *space*; *collaborative/ peer learning*; *teaching approach/delivery*; and *design unit*. *Space* was further distinguished into two parts, *physical student workspace* and *teaching space*. *Physical student workplace* included references to dedicated studio spaces as well as studio spaces available for a day. Teaching space referred to a physical space to teach in, a concept and virtual space. An example: "Not a place. It is a site for learning. They are classrooms not an individual place with ownership. The studio is an intellectual rather than a physical place." (South Australia – academic manager, SA-am). *Collaborative/ peer learning* refers to interaction and discussion amongst peers and with tutors, a 'learning community'. References to studio culture were also placed in this category. *Teaching approach/ delivery* included descriptions of studio based teaching methods, whereas *design unit* referred to the actual teaching unit and identified its size and number of contact hours.

3 Results and Discussion

The form or the term used for studio solicited a variety of responses and most descriptions were composed of two parts. There were very few that were made by one or three associations. In total, there were five main parts identified: *Physical workspace for students*, *Teaching space*, *Collaborative/ peer learning*, *Teaching approach*, and the *Design unit* (examples are discussed later in the paper). Matrix 1 shows the position of the participants' responses (n=44) according to the five parts. Where a third association was identified, this was noted on the matrix in superscript. Less than half of the respondents associated studio with a primary place for students to work in during and outside of class (45%). An equal number of respondents described studio as being linked to the design unit, outlining the number of contact hours and class size. More than a third of responses contained an association to *collaborative/ peer learning* or *teaching approach/ delivery* (36%). The smallest response was for *teaching space*.

| | A. Physical workspace for students | B. Teaching space | C. Collaborative/ peer learning | D. Teaching approach | E. Design unit |
|---|---|-------------------------|---|---|--|
| 1. Physical workspace for students Total = 20 | NSW-am WA-am | | NZ-am (x2) NZ-staff QLD-staff REG-am ^{+D} REG-am (x3) REG-staff SA-staff | NZ-am ^{+1c} (x2) QLD-am VIC-staff | NSW-am NSW-staff NZ-staff ^{+1d} (x2) |
| 2. Teaching space Total = 9 | | | NSW-am | NSW-staff QLD-am ^{+2e} VIC-staff | NSW-am (x2) REG-am REG-staff ^{+1e mix} SA1-staff ^{not a site} |
| 3. Collaborative/ peer learning Total = 16 | | | | SA-am SA-am ^{+E} SA-am ^{space limits} | VIC-am ^{no space} WA-staff ^{space not critical} |
| 4. Teaching approach Total = 16 | | | | VIC-am | REG-am QLD-staff ^{no space} VIC-am (x2) WA-staff |
| 5. Design unit Total = 20 | | | | | NSW-am REG-am SA-am WA-am |

Key: am = academic manager, staff = academic focus groups and REG = Charles Darwin University, Deakin University, Newcastle University, University of Canberra and the University of Tasmania

Matrix 1: Academic managers and focus groups' definition of studio

The most accepted description of studio contained references to the space that students work in and the advantages gained from peer learning; essentially the studio culture (23%). These descriptions predominantly originated from New Zealand and from small to mid-size schools in Australia. The New Zealand schools (3 in total) described the importance of studio and were grappling with how to maintain it. The staff focus groups highlighted the pressures of maintaining studio in terms of sufficient space and time to teach students, far more than the

academic managers. The growth in student numbers in New Zealand has been more dramatic when compared to the trends in Australia and occurred four years later in 1999 (Ostwald and Williams 104). Two of the schools had enrolments in the 490s and the other was 300 (RAIA). Another potential factor, which has supported studios in New Zealand, is the greater number of hours allocated to the design unit. The transcripts suggested around 10 to 12 hours per week were spent in design studio by some academics. The on-line survey found that ideally academics would like 6 or more hours to spend with 18 students per week in the design studio. In the New Zealand schools the students to staff ratios (SSRs) are also far better than in Australia. In 2006, Australia's SSR was 24:1 and New Zealand was 17:1 (Ostwald and Williams 114).

In comparison, the schools in Australia that suggested the importance of studio and peer learning, typically had smaller student enrolments. Their enrolments generally ranged from 200 – 400 students (RAIA). Only two of these responses, were outside this premise. When the larger schools (enrolments from 460 to 664) were analysed their responses did not require studio space. "The studio is a type of delivery rather than a physical space." (NSW-staff). The exceptions were three Heads of School, and they differed from their colleagues' descriptions. In general, Heads of School were more optimistic in their tone than the staff focus groups. A number of the schools that appeared to have significant studio spaces had two primary concerns. The first concerned the utilization of studio space, "...its mainly empty again" (NSW-am). Their studio space was under utilized and questioned how to engage students in the practice of studio, particularly when students combined paid work with study. "As long as I can get a job I don't need you" (VIC-staff). While others felt that the art of studio culture had not been lost but funding was no longer available.

The art hasn't been lost. If there's a reason for students to be together and get feedback from each other and from staff, they'll be there. If there's not, they won't be there. So I see the problem as being more to do with staffing and therefore the budget than with facilities or changes in directions... (SA-am)

The second concern related to the effectiveness of over-the-board tutelage and one-on-one techniques used in studio teaching. It was felt that this technique was not as effective due to the repetition of comments to individual students and that this emphasis on each student would counteract efforts to encourage peer learning. They felt strongly that the "luxurious" studio space had led to complacency in studio teaching delivery.

What I see happening is that rather than encourage alternate forms of education that is the studio might be a space where all sorts of flexible or informal arrangements might occur: small group learning, student based delivery, peer to peer teaching. What I see is that tutors follow students around repeating the same didactic lecture over and over and over. Then they sit down six hours later and say I'm really

exhausted as though they've done a good days work. (NZ-am)

This last concern is not dependent on space. Other responses indicated similar practices by the making of an appointment list prioritising individual student consultations. This approach also negates the principles of peer learning, exchange and the discussion of many ideas beyond their immediate work. Academics admitted feeling relieved if some students did not turn up or request an appointment. Some ascribed the absence of students and shortness of time spent at university due to it being a commuter campus and students' mobility to work where they choose with a laptop. One respondent embraced these conditions generating a virtual studio. The schools without dedicated workspaces may have an advantage as these circumstances have led to the development and testing of techniques in design studio teaching. Essentially, the descriptions indicate the goal to maximize time spent with students in studio by making it a useful event, exercise or workshop that engages the group in discussion and work. One school without studio space thought that students had not been adversely affected as their outcomes were comparable to other schools. Another school indicated that the exercises formed a small part of the assessment outcomes in their portfolio. To devise an exercise or event for each studio session takes more time initially when compared to typical one-on-one tutelage sessions. One-on-one tutelage requires limited or no need to brief sessional staff. This paper has only just begun to explore the themes in what studio means in Australasia. Respondents indicated that studio practice in their schools "varie[d] from year to year, and also depend[ed] on who's leading it" (WA-staff). What is evident is the diversity of opinions that exist, for example, one participant thought that past teaching practices were not "some kind of golden age" (SA-am). They thought their own education lacked when compared to practices today. Staff from another region expressed their concern that studio and studio-based teaching may become a 'Jurassic Park' and hoped it survived.

4 Conclusions

Studio has shifted in its original meaning for more than half of the schools in Australasia. Less than half of respondents interviewed connected physical workspace for students in their definition of studio. References made to dedicated workspaces were in most cases connected to a lower number of enrolments in the school and most likely the availability of studio space. Small to mid-size schools (200-400), typically regionally based schools in Australia and the New Zealand schools, were found to encourage studio spaces and studio-based teaching. Experimentation in design studio teaching seemed to originate from schools without dedicated studios or workspaces as they were forced to innovate or consider alternatives. The primary use of one-on-one tutorials was seen to be counteractive in establishing peer learning, because students valued and relied solely on their tutors' opinion. This paper speculates whether the expansion of academics' roles and responsibilities (particularly in research, increased qualifications and administration) coupled with increases in class sizes quell notions or efforts to design and test new techniques. Future research will investigate some of the techniques briefly mentioned in this paper that engage students and advance peer learning.

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